P	TO/S	B/05	(08-03)

Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office. U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to re

UTILITY PATENT APPLICATION **TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	127061-1	6
First Inventor	Michael Francis HENRY	S
Title	Directionally Solidified	
Express Mail Label No.	ER 373175730 US	682

	PPLICATION ELEMENTS ter 600 concerning utility patent application contents.	ADDRESS TO: Commiss P.O. Box				
2. Applicant of Applicant of Applicant of See 37 CFT 3. Specification (preferred archive - Cross Reference or a computable - Statement - Reference or a computable - Backgrount - Brief Summan - Brief Description - Abstract of - Claim(s) - Abstract of - Abstract of - Claim(s) - Abstract of - Claim(s) - Abstract of - Copy from	Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing) Applicant claims small entity status. See 37 CFR 1.27, Pocification Cross Reference to Related Applications - Statement Regarding Fed sponsored R & D - Reference to sequence listing, a table, or a computer program listing appendix - Background of the Invention - Brief Description of the Drawings (if filed) - Detailed Description - Claim(s) - Abstract of the Disclosure Drawing(s) (35 U.S.C. 113) [Total Sheets 11] - Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 18 completed) i. DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1. CD-ROM or CD-R (a Sequence Submission (if applicable, all necessary) a. Computer Readable Form (CRF) Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) a. Computer Readable Form (CRF) b. Specification Sequence Listing on: CD-ROM or CD-R (2 copies); or CD-ROM or CD-R (2 copies); or CD-ROM or CD-R (2 copies); or ACCOMPANYING APPLICATION PAR ACCOMPANYING APPLICATION PAR Assignment Papers (cover sheet & document 10. 37 CFR 3.73(b) Statement (If applicable) 10. 37 CFR 3.73(b) Statement Document (if applicable) 11. Return Receipt Postcard (MPEP 503) Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1. DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1. OD ROM or CD-R (2 copies (if applicable, all necessary) a. CD-ROM or CD-R (2 copies); or CD-ROM or CD-R (2 copies); or ACCOMPANYING APPLICATION PAR 10. 37 CFR 3.73(b) Statement (If applicable, all necessary) a. CD-ROM or CD-R (2 copies); or Statement (IDS) PTO-1449 10. 37 CFR 3.73(b) Statement (IDS) PTO-1449 11. Return Receipt Postcard (MPEP 503) Statement (IDS) PTO-1449 Statement (IDS) PTO-1449 Citation Statement attached deleting inventor(s) Information Disclosure Copies Statement (IDS) PTO					
18. If a CONTINUIN	NG APPLICATION, check appropriate box, and su	noly the requisite information below ar	nd in the first sentence of the			
specification following	ng the title, or in an Application Data Sheet under	37 CFR 1.76:				
Continuatio	on Divisional Continu	ation-in-part (CIP) of prior application	on No.:			
Prior application information: Examiner For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.						
19. CORRESPONDENCE ADDRESS						
Customer N	Number:	OR Corre	espondence address below			
Name Pau	ıl J. DiConza					
GE Global Research Center Address A Brosseth Circle 1/4 2000						
1 Research Circle, K-1 3A60 City Niskayuna State New York Zip Code 12309						
Country USA		Telephone 518-387-6131 Fax				
Name (Print/Type)	Christopher L. Bernard, Esq.		48,234			
Signature	Printopler 1 Bernard	, , ,	Date December 22, 2003			

This collection of information is required by 37 CFR 153(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



PTO/SB/17 (10-03)

Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid QMB control number.

FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

_		
١.	964	በበ

Compl te if Known				
Application Number	Unassigned			
Filing Date	December 22, 2003			
First Named Inventor	Michael Francis HENRY et al.			
Examiner Name	Unassigned			
Art Unit	Unassigned			
Attorney Docket No.	127061-1			

METHOD OF PAYMENT (check all that apply)		FEE CALCULATION (continued)				
Check Credit card Money Other None		3. ADDITIONAL FEES				
Deposit Account:		Entity	Small	Entity	,	
Deposit	Fee Code			Fee (\$)	Fee Description	C D-14
Account Number	1051	130	2051		Surcharge - late filing fee or oath	Fee Paid
Deposit	1052	50	2052		Surcharge - late provisional filing fee or	
Account Name					cover sheet	
The Director is authorized to: (check all that apply)	1053 1812	130	1053 1812		Non-English specification For filing a request for ex parte reexamination	
Charge fee(s) indicated below Credit any overpayments	1804	920*	1804		Requesting publication of SIR prior to	
Charge any additional fee(s) or any underpayment of fee(s)	1004	920	1004	920	Examiner action	
Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.	1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
FEE CALCULATION	1251	110	2251	55	Extension for reply within first month	
1. BASIC FILING FEE	1252	420	2252	210	Extension for reply within second month	
Large Entity Small Entity	1253	950	2253	475	Extension for reply within third month	
Fee Fee Fee Fee Pee Paid Code (\$) Code (\$)	. 1254	1,480	2254	740	Extension for reply within fourth month	
1001 770 2001 385 1 Hilly filing fee	1255	2,010	2255	1,005	Extension for reply within fifth month	
1002 340 2002 170 Design filing fee 770.00	1401	330	2401	165	Notice of Appeal	
1003 530 2003 265 Plant filing fee	1402	330	2402	165	Filing a brief in support of an appeal	
1004 770 2004 385 Reissue filing fee	1403	290	2403	145	Request for oral hearing	
1005 160 2005 80 Provisional filing fee	1451	1,510	1451	1,510	Petition to institute a public use proceeding	
SUBTOTAL (1) (\$) 770.00	1452	110	2452	55	Petition to revive - unavoidable	
	1453	1,330	2453	665	Petition to revive - unintentional	
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE	1501	1,330	2501	665	Utility issue fee (or reissue)	
Extra Claims below Fee Paid Total Claims 26 -20** = 06 x 18 = 108	1502	480	2502	240	Design issue fee	
	1503	640	2503	320	Plant issue fee	
Independent	1460	130	1460	130	Petitions to the Commissioner	
	1807	50	1807	7 50	Processing fee under 37 CFR 1.17(q)	
Large Entity Small Entity	1806	180	1806		Submission of Information Disclosure Stmt	
Code (\$) Code (\$) 1202 18 2202 9 Claims in excess of 20	8021	40	8021	1 40	Recording each patent assignment per property (times number of properties)	
1201 86 2201 43 Independent claims in excess of 3	1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1203 290 2203 145 Multiple dependent claim, if not paid	1810	770	2810	385	For each additional invention to be	
1204 86 2204 43 ** Reissue independent claims over original patent	1801	770	2801	385	examined (37 CFR 1.129(b)) Request for Continued Examination (RCE)	
1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent	1802	900	1802	900		
104.00	Other	fee (sp	ecify) _			
SUBTOTAL (2) (\$) 194.00 **or number previously paid, if greater; For Reissues, see above				Filing F	ee Paid SUBTOTAL (3) (\$) 0.00	
or mamber previously paid, if greater, For Neissues, See above					σσσισισ (σ, (φ) σισσ	

SUBMITTED BY				(Complete (if applicable))		
Name (Print/Type)	Christopher L. Bernard, Esq.	Registration No.	48,234	Telephone	704-373-9999	
Signature	Vhistoples I Remard			Date	December 22, 2003	

WARNING: Information on this form may become public. Credit card information should not be included on this form. Pr vide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRE: SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

EXPRESS MAIL CERTIFICATE

Express Mail No.: - ER 373175730 US

Date of Deposit: - 12/22/2003

Type of Document(s): - Utility Patent Application Transmittal (PTO/SB/05)

- Fee Transmittal (PTO/SB/17)

Credit Card Payment Form (PTO-2038)Specification and Claims (18 pages)

- Drawings (11 sheets)

- Declaration and Power of Attorney (06 pages)

(UNEXECUTED)

Information Disclosure Statement (02 pages)Information Disclosure Statement (PTO/SB/08A)

- Copies of (03) References Cited

- Post Card Receipt

Application No.: - Unassigned

Inventor(s): - Michael Francis HENRY et al.

Title: Directionally Solidified Eutectic Superalloys

for Elevated Temperature Applications

Attorney Docket No.: - 127061-1

I hereby certify that the above-referenced documents are being/have been deposited with the United States Postal Service "Express Mail Post Office to Addressee" under 37 CFR 1.10 on the date indicated above and are being/have been addressed to: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 USA.

Christopher L. Bernard Registration No.: 48,234